

# METHOD OF AND SYSTEM FOR MODULATING AND DEMODULATING A COMMUNICATION SIGNAL USING DIFFERENTIAL QUADRATURE PHASE SHIFT KEYING (DQPSK)

## ABSTRACT OF THE DISCLOSURE

5 A system for and method of modulating and demodulating a  
communication signal using differential quadrature phase shift keying  
(DQPSK) can include, upon receiving an inbound communication signal,  
demodulating the inbound communication signal by obtaining Pi/4  
differential quadrature phase shift keying (DQPSK) symbols, translating  
10 the Pi/4 DQPSK symbols into quadrature phase shift keying (QPSK)  
symbols, and mapping the QPSK symbols to a pair of bits. Upon initiating  
an outbound communication signal, the system and method can include  
modulating the outbound communication signal by obtaining  
communication bits indicative of the outbound communication signal,  
15 translating the communication bits to three communication bits, and  
mapping the translated bits to DQPSK symbols.

*expected!*  
- inbound / outbound } do not require  
- demod / mod } search terms

DQPSK & QPSK

map 5.4 265

I and Q 169

look up table